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FOR THE BENEFIT OF THE LESS DEVELOPED AREAS

SUMMARY

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Economic Commission for Europe

PROBLEMS ARISING IN THE ESTABLISHMENT AND DEVELOPMENT OF THE IRON AND STEEL INDUSTRY IN LESS DEVELOPED COUNTRIES

By The Steel, Engineering and Housing Division, E.C.E.

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Problems arising in the establishment and development of the iron and steel industry in less developed countries.
by the Steel, Engineering and Housing Division, ECE.

SUMMARY

1) Introduction

Iron and steel products hold a key position in economic development since they constitute an important material component of agricultural and industrial equipment, power installations, transport facilities, construction and, at later stages, of many durable consumer goods. A close correlation exists therefore between indicators of economic growth, (e.g. gross national product per capita, gross domestic fixed capital formation, industrial output, private consumption, expenditure etc.) and steel consumption per capita.

In countries which do not possess a steel industry, large quantities of steel products are required when economic development is started on a broad front. The scarcity of foreign exchange for their import creates a strong incentive to establish an iron and steel industry in the country itself. Although many developing countries possess sizeable iron ore reserves, energy resources and availability of skilled labour pose major problems. It is for these reasons that in developing countries the establishment of such an industry, which involves sizeable investments, is undertaken in carefully considered stages which proceed hand in hand with the increasing formation of skilled labour.

2) Problems of programming

The close relationship between steel consumption and production on the one hand and economic development on the other, calls for the establishment of co-ordinated growth programmes for the iron and steel industry and for the other sectors of the economy. In the establishment of a programme for the erection of an iron and steel industry, consideration is given to the following:

a) locational factors (availability of iron and steel-making raw materials, choice of site of a plant, availability of skilled labour and of transport facilities);

b) choice of equipment and production processes; these are closely related to the quality and type of raw materials available and depend also on considerations of a purely technical and financial nature;

c) planning of the production programme; this depends on the general plan for the development of a country, on the availability of technical know-how and cost considerations.

3) Problems of financing

The price of iron and steel making equipment and the cost of its installation are comparatively high and often this is beyond the financial capacity of individual countries. As a result, new steel projects are often financed jointly by the government of a developing country, international financial institutions and by loans from foreign governments, equipment producers and sometimes enterprises of the iron and steel industry establishing subsidiary plants abroad.

4) Labour Problems

The training of skilled labour and technical personnel for the steel industry requires in general, a relatively long period of time. The shortage in developing countries of qualified workers directly attached to production is further aggravated by the need for highly qualified maintenance and repair personnel. Internationally, great progress has been made during the post war years in providing help in training. There are many facilities provided under the bilateral aid programmes and among the services offered by the international organisations, the manifold training activities sponsored by the International Labour Organisation under the United Nations technical assistance programme and Special Fund, and the group-fellowship programmes sponsored by the United Nations deserve special mention.

5) Conclusions

The paper touches only briefly upon some of the major problems arising in the establishment of iron and steel industries in developing countries. In addition to the usual difficulties encountered in the industrial development of these countries, the steel industry poses particular problems in view of the size of investment, the size and the skill of the labour force and the conditions relating to the prior or concurrent development of the needed raw materials and energy supply. The difficulties encountered are by no means insurmountable, and experience show that initial frictional losses decrease in importance and time required for starting domestic iron and steel production is steadily shortening.

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